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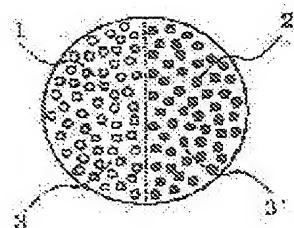
(21)Application number : 04-174791 (71)Applicant : KURARAY CO LTD
(22)Date of filing : 08.06.1992 (72)Inventor : YAMAZAKI TAKESHI
YONEDA HISAO

(54) FLEXIBLE ARTIFICIAL LEATHER OF SUEDE TONE AND ITS PRODUCTION

(57)Abstract:

PURPOSE: To obtain a flexible artificial leather of suede tone having uniform elongation elasticity, extreme flexibility, handle with fullness and equal nap.

CONSTITUTION: Interlaced nonwoven fabric of sea island conjugate yarn of ultrathin fiber bundled yarn generation type wherein an island component 1 group composed of an elastic polymer and an island component 2 group composed of a nonelastic polymer are adjoined side by side is shrunk, a sea component is removed, napped fibers are formed and the nonwoven fabric is dyed to give an artificial leather of suede tone wherein nonwoven fabric of three-dimensionally interlaced ultrafine fiber bundled yarn prepared by bundling a pair of an ultrafine fiber bundle (elastic ultrafine fiber bundle) composed of the elastic yarn and an ultrafine fiber bundle (nonelastic ultrafine bundle) composed of the nonelastic yarn has napped fibers at least one face, the elastic ultrathin fiber bundle is partially glued in the elastic ultrathin fiber bundle or between the elastic ultrathin fiber bundle and the nonelastic ultrathin fiber bundle and bonded to part of other elastic ultrathin fiber bundle yarn.



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CLAIMS

[Claim(s)]

[Claim 1]It is a sheet like object of a nonwoven fabric in which super-thin textiles convergence textiles on which a super-thin fiber bundle (elastic super-thin fiber bundle) which consists of elastic polymer of a couple, and a super-thin fiber bundle (inelastic super-thin fiber bundle) which consists of inelastic polymer converged carried out three-dimensional interlacement which forms piloerection in the whole surface at least, Suede tone artificial leather, wherein an elastic super-thin fiber bundle is at a deadlock selectively between the inside and an inelastic super-thin fiber bundle and these super-thin textiles convergence textiles are at a deadlock with some other super-thin textiles convergence textiles.

[Claim 2]A process of producing an interlaced nonwoven fabric using super-thin textiles convergence textiles type-of-seasonal-prevalence textiles which two sea island structure which has an island component group which consists of an island component group which consists of elastic polymer, and inelastic polymer adjoined, A manufacturing method of suede tone artificial leather which becomes the whole surface at least from a process of carrying out contracting processing of this interlaced nonwoven fabric, a process of carrying out conversion of these super-thin textiles convergence textiles type-of-seasonal-prevalence textiles to super-thin textiles convergence textiles, a process of forming piloerection, and a process of dyeing an obtained textiles piloerection base.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to suede tone artificial leather excellent in elasticity and the level dyeing nature of the piloerection. In detail, even if it performs repetition elongation deformation, structure modification is not produced substantially, i.e., this invention is excellent in elasticity and textiles interlacement nature, and excellent in the level dyeing nature of piloerection textiles, is flexible and relates to the suede tone artificial leather which has aesthetic property with a sense of fulfillment.

[0002]

[Description of the Prior Art] The staple fiber which obtained it by carrying out flash plate spinning of the polyurethane as an interlaced nonwoven fabric excellent in elasticity is deposited conventionally. The continuous glass fiber nonwoven fabric etc. of the polyurethane obtained by the span bond method are known by the nonwoven fabric on which the textiles intersection was pasted up by methods, such as self-conglutination, or JP,52-8177,A like the statement. However, it is difficult to form textiles interlaced object sufficient in conventionally publicly known interlacement, such as needle punching and a fluid injection method, in the nonwoven fabric of these polyurethane, since textiles' own elasticity is too flexible strongly. It is elastic and the nonwoven fabric which mixed with cotton and obtained 5 to 80 % of the weight of elastic fibers for inelastic textiles is proposed by JP,48-18579,A as a strong thing, for example. However, since rigidity differs from an extension elastic action to the extent that an elastic fiber does not become as compared with inelastic textiles, it is very difficult to fully mix with cotton textiles and to obtain a good web with a carding machine, and to obtain a still better combination. Although the method of building an interlaced nonwoven fabric using the bicomponent fiber which consists of inelastic polymer and elastic polymer, and exfoliating in each ingredient polymer after that is indicated in JP,52-85575,A. By this method, since elastic polymer and inelastic polymer are restrained in the same state, it cannot have structurally sufficient elasticity. Mix with cotton and the blend spinning textiles which become JP,40-2792,B from elastic polymer and inelastic polymer are used as a nonwoven fabric. After [inelastic polymer in these textiles that constitute the obtained nonwoven fabric] dissolving a kind at least, the method of re-solidifying this inelastic polymer within a nonwoven fabric is proposed. Although the nonwoven fabric which has good interlacement nature by this method is obtained, since the elasticity of a nonwoven fabric is governed by the textiles which consist of inelastic polymer, there is nothing that has sufficient elasticity.

[0003] Although this nonwoven fabric in which the elastic fiber and the inelastic textiles which are produced from a bicomponent fiber by removing one ingredient are mixed with cotton, and the manufacturing method of the elastic nonwoven fabric is proposed is excellent in JP,1-41742,B at elasticity and interlacement nature, Since the manufacturing method has taken the cotton-mixing method, when it is used for piloerection products, the piloerection of an elastic fiber and the piloerection of inelastic textiles are intermingled, and homogeneity is missing in respect of the color enhancement of the piloerection. In JP,61-201086,A. Although the sheet like object which the super-thin textiles which consist of inelastic polymer, and the super-thin

textiles which consist of elastic polymer dissolve some super-thin textiles which remove a sea component from the nonwoven fabric of the compound sea island textiles which exist in the same sea component, and consist of elastic polymer, and use as a binder is indicated. In order that elastic polymer may carry out convergence adhesion of the super-thin ***** which consists of inelastic polymer, the flexible aesthetic property of super-thin textiles is not obtained, and the high thing of the elasticity which stress becomes small and also makes a deer the purpose since elastic polymer is super-thin textiles does not become. Like the above, under the present circumstances, processability is good, and has elasticity and outstanding suede tone artificial leather of the homogeneity of the piloerection is not obtained.

[0004]

[Problem(s) to be Solved by the Invention]In the manufacturing method of the nonwoven fabric known conventionally, each had interlacement nature and elasticity, and when a piloerection sheet was used, suede tone artificial leather with the graceful and uniform piloerection was not obtained. The purpose of this invention is to provide flexible suede tone artificial leather with the uniform surface, when it has extension elasticity uniform as an elastic nonwoven fabric, and the aesthetic property which is very flexible and has a sense of fulfillment and it is used as a piloerection sheet.

[0005]

[Means for Solving the Problem]This invention is a sheet like object of a nonwoven fabric in which super-thin textiles convergence textiles on which a super-thin fiber bundle (elastic super-thin fiber bundle) which consists of elastic polymer of a couple, and a super-thin fiber bundle (inelastic super-thin fiber bundle) which consists of inelastic polymer converged carried out three-dimensional interlacement which forms piloerection in the whole surface at least. These super-thin textiles convergence textiles are at a deadlock selectively [fiber bundle / elastic super-thin] between the inside and an inelastic super-thin fiber bundle. And it is suede tone artificial leather being at a deadlock with some other super-thin textiles convergence textiles. A process of producing an interlaced nonwoven fabric using super-thin textiles convergence textiles type-of-seasonal-prevalence textiles which two sea island structure which has an island component group which consists of an island component group which consists of elastic polymer, and inelastic polymer adjoined. It is a manufacturing method of suede tone artificial leather which becomes the whole surface at least from a process of carrying out contracting processing of this interlaced nonwoven fabric, a process of carrying out conversion of these super-thin textiles convergence textiles type-of-seasonal-prevalence textiles to super-thin textiles convergence textiles, a process of forming piloerection, and a process of dyeing an obtained textiles piloerection base.

[0006]Textiles which constitute a base layer of suede tone artificial leather of this invention are the super-thin textiles convergence textiles on which a super-thin fiber bundle (elastic super-thin fiber bundle) which consists of elastic polymer of a couple, and a super-thin fiber bundle (inelastic super-thin fiber bundle) which consists of inelastic polymer converged. Even if it is the super-thin textiles convergence textiles on which elastic super-thin textiles and inelastic super-thin textiles converged similarly, if elastic super-thin textiles and inelastic super-thin textiles are one of textiles which form a bunch by the mixed state, the purpose of this invention cannot be attained. Super-thin textiles convergence textiles of this invention are obtained by removing a sea component from super-thin textiles convergence textiles type-of-seasonal-prevalence textiles which two sea island structure which has an island component group which consists of an island component group which consists of elastic polymer, and inelastic polymer adjoined.

[0007]That is, super-thin textiles convergence textiles type-of-seasonal-prevalence textiles used by this invention are textiles of structure which stuck inelastic super-thin fiber bundle type-of-seasonal-prevalence textiles whose island fiber component is inelastic polymer, and two sea-island-structure textiles of elastic super-thin fiber bundle type-of-seasonal-prevalence textiles whose island component is elastic polymer in the shape of side by side. Mixed fusion of the polymer chip is carried out as a method of manufacturing such textiles. Or a method of carrying out compound spinning of the two sea island fibrous components which use as an island component elastic polymer or inelastic polymer produced by fusing independently and repeating

division integration to the shape of side by side. There are a method of carrying out spinning using a spinning nozzle arranged so that right-and-left bisection of the core component may be carried out in a spinning method of multicore sheath-core textiles, inelastic polymer and elastic polymer may be supplied to each and each core component may adjoin with block like shape, etc. Sectional shape of textiles may be variant sections, such as an ellipse form and a cocoon type, outside a circular section, and may be hollow fibers. Anyway, each should just be textiles of sectional shape which adjoined by the shape of a bunch, without mixing substantially an elastic super-thin fiber component and an inelastic super-thin fiber component.

[0008] a ratio of an inelastic super-thin fiber component and an elastic super-thin fiber component — 95 / 5 — 5/95 — it is 85 / 15 — 30/70 desirably, a sheet which will be obtained if inelastic textiles will be not less than 95% lacks in pliability — conglutination of an elastic fiber — few — textiles — base — if it is easy to start an omission and becomes 5% or less on the other hand, even if aesthetic property is flexible, it will become far from appearance of a suede tone. 0.5 denier or less of single fiber fineness of super-thin textiles which constitute super-thin textiles convergence textiles is 0.1 denier — 0.002 denier preferably. When it becomes a thing which has aesthetic property hard when single fiber fineness will be 0.5 deniers or more and in which appearance of a suede tone is inferior and becomes 0.002 denier or less on the other hand, super-thin textiles are too thin and color enhancement is inferior in them.

[0009] This polymer is formed in textiles with elastic polymer of an island component used for this invention, A rate of extension elastic recovery of 1 minute after at the time of elongating these textiles 50% at a room temperature means polymer which is not less than 50%, and a rate of extension elastic recovery measured similarly means polymer to which a marginal extension rate does not reach to 50% in 50% or less or a room temperature as inelastic polymer. A copolymer in which inelastic polymer which has in an island component and can be makes polyethylene terephthalate or it a subject, for example, Spinnable-properties polyester, such as a copolymer which makes polybutylene terephthalate or it a subject, aliphatic polyester, or its copolymer. Polyolefines, such as nylon 6, Nylon 66, Nylon 610, nylon that are represented with Nylon 12, other spinnable-properties polyamide, polyethylene, polypropylene, and polybutylene, an acrylic copolymer, poly vinyl alcohol, etc. are mentioned.

[0010] On the other hand, elastic polymer used for an island component, for example Polyesterdiol, Polyetherdiol, polyester etherdiol, polylactonediol, The polyurethane produced at least by making a kind, organic diisocyanate, and a chain extension agent that has two active hydrogen atoms which were chosen from polymer diol of the average molecular weights 500—3500, such as polycarbonatediol, react. The polymer which has a conjugated diene polymer or conjugated diene polymer blocks, such as polyisoprene and polybutadiene, in a molecule, and the other polymer which show the above-mentioned rubber elasticity action in which spinning is possible are mentioned.

[0011] Polymer which constitutes a sea component is polymer which differs in solubility or resolvability over a solvent with specific inelastic polymer and elastic polymer of an island component, or a decomposition agent, and is that with which a thermoforming temperature requirement has lapped, In within a time [which spinning takes in a molten state], what exerts neither a reaction which produces trouble, nor an interaction on spinning among these polymer is used. For example, it is at least one kind of polymer chosen from polymer, such as polyethylene, polypropylene, an ethylene propylene copolymer, an ethylene-vinyl acetate copolymer, polystyrene, a styrene acrylic copolymer, and a styrene ethylene copolymer. Although it does not matter even if a sea component combined with inelastic polymer and elastic polymer is the same and it differs, In using different things, in consideration of an ease etc. of selection of a solvent used for crack prevention of textiles in spinning nature and a nonwoven fabric manufacturing process, and super-thin-ized processing, or a decomposition agent, it selects suitably.

[0012] Conventionally, by a publicly known method, obtained super-thin textiles convergence textiles type-of-seasonal-prevalence textiles perform down stream processing, such as extension, heat setting, crimp, a cut, and filamentation, and produce raw cotton. This raw cotton is opened with a card and formed in random waves or a crossing lap wave by a weber. A wave is laminated if needed and made into desired weight, a use which points to weight of a wave — a

twist — alias — although it becomes, generally the range of 100 – 3000 g/m² is desirable. Super-thin fiber bundle type-of-seasonal-prevalence textiles which do not contain an elastic fiber ingredient can be mixed and used for super-thin textiles convergence textiles type-of-seasonal-prevalence textiles in the range which does not spoil an effect of this invention. a mixed amount in this case — a ratio of the whole inelastic super-thin fiber component and an elastic super-thin fiber component — 95 / 5 – 5/95 — it is the range of 85 / 15 – 30/70 desirably.

[0013] Subsequently, textiles interlaced processing is performed by a publicly known means, and a textiles interlaced nonwoven fabric is formed. Desirable interlaced processings are the needle punching method and/or a high-pressure-water style spray method. Although the number of needle punch differs from conditions by shape of needle used, or thickness of a wave, they are generally set up in the range of 200 – 2500 punch / cm². When needle punch conditions are too strong, cutting of textiles will increase from the interlaced effect of textiles rather, structure destruction will be produced, expansion of wave area will be caused, and a physical-properties fall of tear strength etc. will be caused. When interlacement is insufficient, it becomes a physical-properties fall of exfoliation strength etc., and a thing of an appearance defect by shortage of piloerection textiles.

[0014] When giving sufficient elastic action for suede tone artificial leather obtained by this invention, and acquiring pliability and raising treatment are performed, in order to obtain sufficient piloerection textiles, a textiles interlaced nonwoven fabric must be shrunk. A grade of contraction is a grade which produces 10% – 80% of area contraction to area of a nonwoven fabric before contracting processing. This contracting processing must be performed under conditions which the elastic fiber ingredient contracts more greatly from an inelastic fiber component which is an island component. Generally elastic polymer has a tendency contracted at low temperature from inelastic polymer. In being sea island textiles to which an island component of inelastic polymer and elastic polymer is intermingled in the same sea component, even if it performs contracting processing under conditions which only elastic polymer contracts, inelastic polymer is stubborn, will be in a state, and do not cause contraction as a single fiber, but Since two sorts of island components are classified in textiles of this invention and it is arranged at block like shape, when contracting processing is performed under conditions which elastic polymer contracts more greatly from inelastic polymer of an island component, textiles become bimetal-like, and revealed crimp and they will be contracted. When this state removes a sea component later, a super-thin fiber bundle of inelastic polymer will be loosened as an organization, and elasticity and pliability which are made into the purpose will be acquired.

[0015] As one of the modes of the last suede tone artificial leather, it is possible to also make a textiles interlaced nonwoven fabric contain binder resin. Character of suede tone artificial leather can be changed by making binder resin contain. Therefore, reliance of binder resin given is also good at polymer in which elastic polymer or inelastic polymer also occupies these both staging area further. However, when wishing to have artificial leather with large pliability and elasticity, it is preferred to use elastic polymer. The amount of being impregnated of binder resin is 50% or less of range preferably 100% or less to a super-thin fiber component, although it fluctuates suitably by aesthetic property etc. of a final product made into the elasticity of resin, or the purpose. If there is too much quantity of binder resin, aesthetic property will become hard, or the feeling of rebounding like rubber comes out, or it is inferior to elasticity.

[0016] If an example of elastic polymer in which it is used as binder resin is given, Polyester system polyurethane, polyether system polyurethane, polyester ether system polyurethane, Polyurethane, such as poly lactone system polyurethane and polycarbonate system polyurethane. Acrylic acid, a polymer of acrylic ester or copolymers, polyisoprene, Polymer, such as polymer which has a conjugated diene polymer or conjugated diene polymer blocks, such as polybutadiene, in a molecule, a styrene butadiene copolymer, an acrylonitrile butadiene copolymer, a vinyl acetate polymer, or a copolymer, is mentioned. When small resin of an elastic action is used as binder resin, polymer, such as plasticization polymer of a vinyl chloride polymer or a copolymer, polyamide or denaturation polyamide, and an ethylene-vinylacetate copolymer,

can be used.

[0017]Choose a kind or two sorts or more from among these polymer, the dissolution, a solvent which is not swollen remarkably, or a dispersing agent is made to dissolve or distribute nonwoven fabric composition textiles, and a nonwoven fabric is impregnated with this solution. An order with which a nonwoven fabric is impregnated a solution or dispersion liquid of binder resin, (1). A textiles interlaced nonwoven fabric after (2) contracting processings with which a textiles interlaced nonwoven fabric before contracting processing is impregnated is impregnated. (3) Although it may carry out in order of ***** with which it is impregnated after removing a sea component of textiles which constitute a textiles interlaced nonwoven fabric, it is preferred that an order of (2) gives binder resin to obtain sticky aesthetic property of elasticity and pliability. Since it does not fix super-thin textiles with binder resin in carrying out in order of (3), it is preferred that temporary fastening resin, such as water soluble resin, is impregnated in advance of being binder resin impregnated.

[0018]As a method of solidifying binder resin from a binder resin solution or dispersion liquid with which a textiles interlaced nonwoven fabric was impregnated, What is necessary is just to adopt suitable coagulation conditions according to the characteristic of binder resin, although there are a method of processing and solidifying in method [of solidifying by heat treatment], method [of solidifying by hot water processing], method [of processing and solidifying in a salt water solution], nonsolvent, or solvent-nonsolvent mixed liquor, etc.

[0019]By processing by a solvent or a decomposition agent of a sea component of super-thin textiles convergence textiles type-of-seasonal-prevalence textiles, a textiles interlaced nonwoven fabric which does not give or give binder resin removes a sea component, carries out conversion to super-thin textiles convergence textiles, and let it be a fiber base. If solvent treatment for sea component removal is performed, in many cases, a solvent will swell and elastic polymer will produce partial conglutination in an inside of a super-thin fiber bundle, and a textiles confounding part at the time of desiccation of a solvent. When not producing such conglutination, it processes or heat-treats by other suitable solvents and swelling agents, and elastic super-thin textiles are made to adhere selectively in an inside of a super-thin fiber bundle, and a textiles confounding part. Conglutination partial [processing / this / conglutination] in an elastic super-thin fiber bundle inside partial conglutination inside an elastic super-thin fiber bundle, and super-thin textiles convergence textiles, and an inelastic super-thin fiber bundle. And it is adhering in the super-thin textiles convergence textiles in a textiles confounding part, and an elastic super-thin fiber component must dissolve and permeating an inside of an inelastic super-thin fiber bundle, and carrying out the union unification of the inelastic super-thin fiber bundle by re-solidifying must avoid. If the union unification of the inelastic super-thin fiber bundle is carried out by elastic fiber ingredient, a fiber bundle will become hard, aesthetic property of a sheet will become hard, and graceful piloerection with a feeling of suede is not obtained. By partial conglutination of partial conglutination between such elastic super-thin textiles, inelastic super-thin textiles, and elastic super-thin textiles, while the shape stability of a sheet improves, an omission preventive effect of a fluff when the surface is napped also improves.

[0020]Next, a fiber base makes a textiles piloerection side which made super-thin textiles the whole surface with a subject at least form. A method of making textiles piloerection forming can be conventionally performed by methods, such as BAFFINGU by a publicly known sandpaper, and card clothing nap raising. What is necessary is just to dye by a usual method according to construction material of resin which constitutes a fiber base, although a fiber base in which textiles piloerection was formed on the surface ranks second and is dyed. a dyed suede tone fiber base is conventionally publicly known — it rubs, finish processings, such as softening processing and brushing, are performed, and a product of suede tone artificial leather is obtained.

[0021]Suede tone artificial leather obtained by this invention is a thing with aesthetic property which is excellent in the homogeneity of surface piloerection textiles, is flexible, and is elastic, and has a sense of fulfillment, and is suitable for an object for garments, an object for shoes, and interior design.

[0022]

[Example] Next, although an example explains operation of this invention concretely, this invention is not limited to these examples. The part in an example and % are related with weight, as long as there is no notice.

[0023] What mixed the chip and polyethylene of 6 nylon with the wt. ratio 1:1 to the extrusion machine (A) side using example-1 side-by-side spinning equipment, Melt spinning was performed [what mixed the chip of polyester system polyurethane and polystyrene to the extrusion machine (B) 1:1] for the discharge quantity ratio in extrusion machine (A):extrusion machine (B) =60:40, and 10-denier raw thread was obtained. If the section photograph of this raw thread is observed, a sea component will separate to the bilayer of polyethylene and polystyrene like drawing 1. The island component of nylon was the side-by-side bicomponent fiber which the island component of polyester system polyurethane is distributing to the sea component of about 280 islands and polystyrene on about 100 islands at the sea component of polyethylene.

[0024] Next, this bicomponent fiber was extended 2.5 times, crimp was performed, it cut to 51 mm of fiber length, and the staple with a fineness of 4 deniers was obtained. Subsequently, the wave was produced by crossing lap waiver, needle punching of a total of 600 punches / cm² was performed by turns from both sides of the web, and the textiles interlaced nonwoven fabric of superintendent officer about 780 g/m² was built. This textiles interlaced nonwoven fabric was shrunk 25% in area with 95 ** hot water. The textiles interlaced nonwoven fabric which carried out contracting processing was dried, and polyethylene and polystyrene of the sea component of the textiles interlaced nonwoven fabric were removed in heat perchloroethylene. The pasting up paint by conglutination was formed in the portion with which the weld between the super-thin textiles of polyester system polyurethane, and nylon super-thin textiles and the super-thin textiles of polyester system polyurethane are in contact by this sea component solvent wiping removal, and the textiles base of 1.4 mm in thickness and weight 525 g/m² was obtained.

[0025] After having sliced the thickness of this textiles base to two piece housing, carrying out buffing of the slice cut surface with the sandpaper and performing thickness ***** to 0.55 mm in thickness, raising treatment was performed with the sandpaper of particle size #400, and other fields were used as the textiles piloerection sheet. This sheet was dyed brown by 1:2 type auriferous complex salt dye on the following conditions.

Dyeing condition RANIRU Brown GG 2%owf yl gallane Yellow GRL 1%owf REBERAN NKD 1 g/l dyeing temperature By drying, rubbing and performing ready hair processing after 92 ** dyeing. The surface was uniform and flexible brown suede tone artificial leather excellent in elasticity was obtained as shown in Table 1.

[0026]

[Table 1]

	実施例 1		実施例 2		比較例 1		比較例 2	
	綿	綿	綿	綿	綿	綿	綿	綿
厚さ (mm)	0.58		0.55		0.58		0.57	
目付 (g/s ²)	228		215		220		225	
引張強力 (kg/25mm)	17.7	8.6	18.0	8.3	14.7	15.5	11.6	5.1
引張伸度 (%)	85	150	80	135	50	60	107	214
風合い	○		○		×		◎	
毛羽感	◎		◎		×		×	

[0027] What mixed the chip and polyethylene of 6 nylon with the wt. ratio 1:1 to the extrusion machine (A) side with the spinning method of example-2 example-1. Melt spinning was performed [what mixed the chip of polyester system polyurethane and polyethylene to the extrusion

machine (B) 1:1] for the discharge quantity ratio in extrusion machine (A):extrusion machine (B) =60:40. When the section photograph of this raw thread was observed, it was the sea-island composite fiber by which the island component group of nylon and the island component group of polyester system polyurethane were bisected in the sea component of polyethylene as shown in drawing 2. The surface was uniform and flexible brown suede tone artificial leather excellent in elasticity was obtained as it was shown in Table 1 like example-1, when these textiles were made as an experiment to suede tone artificial leather on the same conditions as below extension example-1.

[0028]Blend spinning is performed for 6 nylon and polyester system polyurethane which had and were in comparative example-1 example-1, and polyethylene by the ratio of 3:2:5, Polyethylene obtained the sea-island composite fiber with a fineness of 10 deniers in which 6 nylon and polyurethane were intermingled at random as an island component by the sea component of three ingredients as shown in drawing 3. These textiles were used as the interlaced nonwoven fabric through extension, crimp, a cut random web, and needle punch by the same method as example-1. As a result of hot water's performing contracting processing for this nonwoven fabric, 8% and contraction had little area contraction. Next, as a result of extracting polyethylene of a sea component and going by heat perchloroethylene to nap raising and dyeing finishing by the same method as example-1, aesthetic property became what has inelastic surface hard and few piloerection textiles as shown in Table 1. Carrying out conglutination unification here and there by the polyurethane super-thin fiber component in which 6 nylon super-thin textiles are intermingled also inside a super-thin fiber bundle except that a polyurethane super-thin fiber component adheres in a textiles confounding point, when the state of the super-thin textiles of the obtained sheet is observed was observed.

[0029]The two-ingredient sea island textiles (A) from which it consisted of 50 copies of comparative example-2 polyester-system polyurethane, and 50 copies of polyethylene, and polyethylene became a sea component, The two-ingredient sea island textiles (B) from which it consisted of 50 copies of 6 nylon, and 50 copies of polyethylene, and polyethylene became a sea component, It created by the melt spinning method, and codrew by having piled up so that it might be set to (A):(B)=4:6 in a stretching process, and suede tone artificial leather was made by the same method as example-1 henceforth. The piloerection of aesthetic property of the super-thin textiles convergence textiles of nylon of a soft thing was coarse, the obtained sheet also had the unique feeling and its feeling of a fluff was bad as it was shown in Table 1.

[0030]

[Effect of the Invention]Suede tone artificial leather of this invention has low elongation stress in the extension range which the extension change on structure does not produce substantially, it is elastic and piloerection textiles are uniform, and aesthetic property is the thing excellent in the sense of fulfillment, and is a good target at the object for garments, the object for shoes, pouches, various gloves, etc.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1]It is a cross section of the multicomponent textiles used by this invention.

[Drawing 2]It is a cross section of the multicomponent textiles used by this invention.

[Drawing 3]It is a cross section of the multicomponent textiles used by this invention.

[Drawing 4]It is a cross section of the multicomponent textiles used by a conventional example.

[Description of Notations]

- 1 The island component which consists of elastic polymer
- 2 The island component which consists of inelastic polymer
- 3 and 3' sea component

[Translation done.]

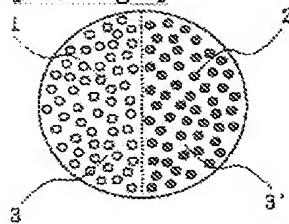
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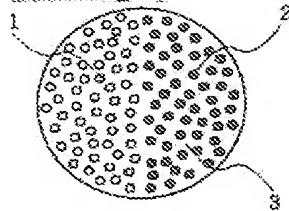
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DRAWINGS

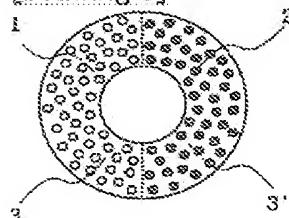
[Drawing 1]



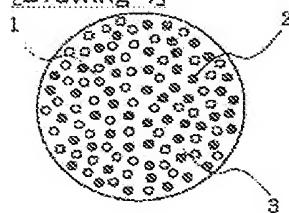
[Drawing 2]



[Drawing 3]



[Drawing 4]



[Translation done.]
